

ABSTRACTS – ORAL

772 Expanding Indications for Stent Placement

Wednesday, March 27, 1996, 8:30 a.m.–10:00 a.m.
Orange County Convention Center, Room 314

8:30

772-1 Immediate and Late Outcome After Carotid Angioplasty (PTA) and Stenting

Sanjay S. Yadav, Gary S. Roubin, Sriram S. Iyer, Peter King, J. Michael Parks, Suresh P. Jain, Christopher Goods, Jiri Vitek, Ronald L. Levine. *University of Alabama at Birmingham, Birmingham, AL*

From 9/8/94 to 8/30/95, 85 pts. (55 symptomatic) had 96 carotid arteries treated in an IRB approved single-center, prospective study evaluating the immediate and long term efficacy of percutaneous carotid PTA and stenting. Symptomatic and asymptomatic pts. with $\geq 60\%$ carotid stenosis were eligible. The protocol required independent neurological evaluation pre- and post-procedure, at 6 weeks and 6 months and carotid angiography at 6 months.

Results: Angiographic success was 99%; 100% had successful stent deployment and stent thrombosis was 0%. One hundred forty-six stents (120 Johnson & Johnson, Inc., 26 Cook, Inc.) were deployed for a mean stent to artery ratio of 1.5 (range 1 to 6). Mean stenosis was reduced from $74\% \pm 14\%$ to $3\% \pm 16\%$. There were no major procedural strokes, MIs or deaths. There were 5 (5%) minor (complete recovery within 7 days) procedural strokes and 1 (1%) major in-hospital stroke secondary to atrial fibrillation. There was 1 death secondary to retro-peritoneal bleeding. Twenty-two pts. have reached the 6 month angiography endpoint with a mean stenosis of $12\% \pm 16\%$ (range – 7 to 57%) and 1 case of restenosis. Deformation of the stent ends was noted in 5 pts. and in 1 pt. repeat balloon dilatation was performed. Late neurologic events have not occurred. Two pts. have died in follow-up from non-cerebrovascular causes.

Conclusion: Carotid angioplasty and stenting is associated with a high immediate success rate and a modest complication rate. Angiographic follow-up to date shows a low incidence of restenosis.

8:45

772-2 Stenting of Unprotected Left Main Coronary Artery Stenosis Without Coumadin

Jean Fajadet, Philippe Brunel, Christian Jordan, Bernard Cassagneau, Jean Marco. *Clinique Pasteur, Toulouse, France*

Left main coronary artery (LMCA) disease is considered as an absolute indication for bypass surgery. However, particular situations unfavourable to CABG can lead to PTCA attempt. The aim of this study is to determine whether stent (S) implantation with the new S management (high pressures for S delivery, antiplatelet regimen with Aspirin and Ticlopidine, and without Coumadin) can be used for the treatment of LMCA stenoses.

Unprotected LMCA S implantation was performed in 26 consecutive patients (pts) treated with Aspirin (100 mg/day) and Ticlopidine (250 mg/day): 23 males, mean age of 68.2 ± 10.6 years, 20 pts had unstable angina, LVEF was $54.3 \pm 11\%$, 8 pts had two vessel disease, 18 pts had three vessel disease. Stenting was elective in 17 pts and non elective in 9 pts. LMCA stenting was achieved successfully in all pts with balloon inflation pressure > 16 Atm. Thirteen pts received Palmaz-Schatz S, 11 pts Gianturco Roubin S and 2 pts AVE S. No acute or subacute thrombosis occurred. No major cardiac events (repeat PTCA, CABG, myocardial infarction, death) occurred during hospital stay. Clinical follow-up obtained in all pts, 7 months (1–24 months) after the procedure, showed: repeat PTCA for restenosis in 5 pts, no CABG or myocardial infarction, sudden death in one pt, 2 pts had functional class 2 angina and 23 pts had no symptoms.

Conclusion: Unprotected LMCA stenting, using high pressures for S delivery and combination of Aspirin and Ticlopidine can be considered as feasible, safe and effective coronary revascularization procedure in selected pts who are poor candidates for CABG.

772-3 Stenting in Protected and Unprotected Left Main Coronary Artery: Immediate and Follow-Up Results

9:00

Akira Itoh, Antonio Colombo, Patrick Hall, Luigi Maiello, Carlo Di Mario, Simonetta Blengino, Massimo Ferraro, Giovanni Martini, Lucia Di Francesco, Leo Finzi. *Columbus Hospital, Milan, Italy*

PTCA of the left main coronary artery (LM) has been associated with a poor clinical follow-up results. We analyzed our results of coronary stent implantation in the LM from the entire stent group of 1679 pts. A total of 33 patients were treated with 38 Palmaz-Schatz stents and 5 AVE stents. In 15 patients an unprotected LM lesion were treated and 18 pts had a functioning bypass conduit on another vessel (protected LM). The indications for stenting were elective for 27 pts, dissection for 3 pts, and suboptimal result after balloon angioplasty for 3 pts. Angiographic success was achieved in 31 pts (94%). An emergency CABG during stent implantation was done in 1 pt, and 1 pt had an unsuccessful stent deployment. Table shows the angiographic results:

	Baseline	Post-Stent	Follow-Up
MLD (mm)	1.37 ± 0.76	3.58 ± 0.60	2.48 ± 0.89
Diameter Stenosis (%)	63 ± 18	4 ± 6	32 ± 22

Angiographic follow-up was performed in 15 patients (48% of eligible patients). Restenosis by 50% diameter stenosis criteria occurred in 2 lesions (13%). Clinical follow-up was available in all patients at a mean interval of 20 ± 12 months. There were 3 deaths within 3 months of the procedure: 2 of them due to LM closure preceded by unstable angina and 1 of uncertain cause. Two other patients died during the 2 years follow-up because of malignancy.

Conclusion: With the technology presently available stenting of LM lesions carries a high short term risk and should be restricted to selected patients who are not considered optimal surgical candidates.

9:15

772-4 Coronary Stenting of Bifurcation Lesions: Immediate and Follow-Up Results

Antonio Colombo, Luigi Maiello, Akira Itoh, Patrick Hall, Carlo Di Mario, Simonetta Blengino, Massimo Ferraro, Giovanni Martini, Lucia Di Francesco, Leo Finzi. *Columbus Hospital, Milan, Italy*

The transcatheter treatment of lesions at coronary bifurcation is a subject of controversy. This study evaluated immediate and long-term efficacy of stent implantation in such lesions. We treated 38 major bifurcation lesions in 34 patients (mean age 61 ± 10 years). The lesion distribution was: 16 LAD-Diag, 11 RCA (PD-PL), 7 LCX-OM, 4 LAD-LCX. Stent indications were: 31 elective (79%), 1 restenosis (3%), 2 suboptimal PTCF, and 4 dissection after PTCA. Patients were divided into two groups according to the stenting strategy. Group I (n = 18): stenting on both vessels involved in the bifurcation lesion; Group II (n = 20): stenting on one vessel and balloon (kissing) dilation of the other vessel. Table shows procedural and follow-up data:

	Group I	Group II
Successful stenting	16 (89%)	19 (95%)
Stent per patient	2.6 ± 2.0	1.6 ± 1.1
Procedural complications	2 (11%)	1 (5%)
Stent thrombosis	1 (6%)	1 (5%)
Death at 1 month	1 (6%)	0

Conclusion: Stenting of bifurcation lesions was confronted with technical complexity and a relatively high event rate after the procedure in this small cohort. Improvements in stent design may be necessary to overcome some of these limitations.

9:30

772-5 Multivessel Palmaz-Schatz Stenting: Acute Results and Long-Term Outcome

Roger J. Laham, Aaron D. Berman, Richard E. Kuntz, Donald S. Baim, David J. Cohen, Joseph P. Carrozza. *Harvard Medical School, Beth Israel Hospital, Boston, MA*

Palmaz-Schatz stenting (PSS) has been approved for the treatment of de-